

Anthony J. Nicholson

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- Education**
- University of Michigan** Ann Arbor, Michigan
Ph.D. (Computer Science and Engineering), August 2008
Dissertation: *Systems-Level Support for Mobile Device Connectivity*
- University of Kansas** Lawrence, Kansas
B.S. (Computer Engineering), *summa cum laude*, May 1999
- Skills** C++, C, Python, Java, Perl, on Linux and Windows. Extensive Linux kernel hacking experience.
- Honors** **Best Paper Award Finalist**, 14th ACM Conference on Mobile Computing and Networking (2008).
Outstanding Graduate Student Instructor, Winter 2005, University of Michigan, Computer Science Dept.
Outstanding Senior, May 1999, University of Kansas, Electrical Engineering and Computer Science Dept.
- Experience**
- Trading Technologies**, Senior Engineer Chicago, Illinois
August 2008—present
Architected and implemented low-latency, real-time networking software to enable electronic trading of commodities futures and other financial instruments. Refactored existing code bases, realizing orders-of-magnitude speedups through improved algorithms. Was responsible for investigating and proposing new algorithms, protocols and designs, as well as implementing code in C++ for Windows and Linux.
- University of Michigan**, Graduate Research Assistant Ann Arbor, Michigan
January 2003—August 2008
Initiated and led several research projects that resulted in publications in top-tier networking and operating systems conferences and journals. Extensive experience modifying the Linux network stack, device drivers, and kernel. Developed application-level software for mobile phones that uses Markov chains to predict wireless bandwidth based on past user mobility and wireless deployment patterns. Other work examined the problem of secure key establishment over insecure networks, such as the Internet. The resultant software from these various projects is in use worldwide by a variety of academic and industrial researchers.
- Intel Research**, Graduate Intern Seattle, Washington
May—August 2005
Worked with researchers at Intel-Seattle and the University of Washington. Developed a system to improve wireless access point discovery for mobile devices by quickly probing the user-visible quality of all available access points before settling on an AP. Results published in ACM MobiSys 2006.
- Comverse Network Systems**, Technical Programmer New York City
February 2001—August 2002
Developed telephony applications in C/C++ on BSD and UNIX, for embedded, interactive voice response (IVR) devices.
- Lucent Technologies**, Member of Technical Staff Holmdel, New Jersey
June 1999—February 2001
Developed embedded control software for DSL access multiplexers (DSLAMs) in C/C++. Experience with wide-area networking over IP, ATM, and telephony networks.
- References** Available upon request.